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The following information has been taken from the documents filed by the applicant

Request for examination pursuant to Sec. 44 of the Patent Act has been filed.

- 54 Device for cleaning the exhaust of an internal combustion engine
 57 A device for cleaning the exhaust of an internal combustion engine features an improved cleaning efficiency even during lean-burn operation without increasing fuel consumption. The device has an electrochemical catalyst (5) installed in the exhaust system (3) of the internal combustion engine (1). The electrochemical catalyst (5) has an electron-conducting substance and an ion-conducting substance, such that an oxidizing reaction and a reducing reaction are promoted by the conduction of ions and electrons, and the exhaust gas (G) in the exhaust system is electrochemically cleaned.

[see source for figure]

ENGINE

THREE-WAY
CATALYST

ELECTROCHEMICAL
CATALYST

THREE-WAY
CATALYST

EXHAUST AMOUNT
ESTIMATING
MEANS

REDUCING-AGENT
FEED EVALUATION
MEANS

MEANS FOR EVALUATING
THE STATE OF THE
ELECTROCHEMICAL
CATALYST

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